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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/788,498	02/21/2001	Klaus Indefrey	3286-0118P	6756

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EXAMINER

PHAN, RAYMOND NGAN

ART UNIT	PAPER NUMBER
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2111

DATE MAILED: 01/14/2004

7

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n No.

09/788,498

Applicant(s)

INDEFREY ET AL.

Examin r

Raymond Phan

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Part III DETAILED ACTION

Notice to Applicant(s)

1. This application has been examined. Claims 1-17 are pending.
2. The Group and/or Art Unit location of your application in the PTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Group Art Unit 2111.

Specification

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 112

4. Claims 4-5, 10-9, 13, are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per claim 4 (page 8, line 3), claim 5 (page 9, line 5), claim 9 (page 9, line 2), using the phrase, "...the application...", lacks proper antecedent basis and causes the claim to be vague and indefinite.

The remaining claims, not specifically mentioned, are rejected for incorporating the defects from the parent claim by dependency.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-17 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Mores (US No. 6,519,720) in view of Brisse et al. (US No. 6,091,527).

In regard to claim 1, Mores discloses a serial bus system comprising a bus master; and at least one bus slave, connected to the bus master via at least one bus line (see col. 3, line 63 through col. 4, line 5); the bus system being operable in a normal mode in which, at the latest after a normal cycle time has elapsed, the bus master transmits digital signal to the bus slave, and the at least bus slave transmits digital signal back to the bus master after each such transmission (see col. 4, line 20 through col. 5, line 24); and operable in an energy saving mode in which the bus master does not transmit any digital signal to the bus slave within the normal cycle time (col. 4, line 20 through col. 5, line 24). But Mores does not specifically disclose the each of the transmitted digital signals being interpreted as a logic zero when a first predetermined current waveform is applied to the bus line; and being interpreted as a logic one when a second predetermined current waveform, which is different from the first predetermined current waveform, is applied to the bus line. However Brisse et al. disclose each of the transmitted digital signals being interpreted as a logic zero when a first predetermined current waveform is applied to the bus line (see col. 6, line 36 through col. 7, line 11); and being interpreted as a logic one when a second predetermined current waveform, which is different from the first predetermined current waveform, is applied to the bus line (see col. 6, line 36 through col. 7, line 11). Therefore, it would have been obvious to a person of an ordinary skill in the art at the time the invention was made to have

combined the teachings of Brisse et al. within the system of Mores because it would reduce the power consumption of the battery.

In regard to claim 2, Brisse et al. disclose wherein, in the energy saving mode and at the latest after the energy saving cycle time has elapsed, which is longer than the normal cycle time, the bus master transmits the digital signals to the bus slave, and the bus slave transmits digital signal back to the bus master after each such transmission (see col. 6, line 36 through col. 7, line 11). Therefore, it would have been obvious to a person of an ordinary skill in the art at the time the invention was made to have combined the teachings of Brisse et al. within the system of Mores because it would reduce the power consumption of the battery.

In regard to claim 3, Mores discloses wherein, in the energy saving mode, bus master no longer transmits any digital signals to the bus slave (col. 4, line 20 through col. 5, line 24).

In regard to claim 4, Brisse et al. disclose wherein, in the energy saving mode, at least one bus slave monitors the bus line for the application of at least one of the first and second predetermined current waveform, and at least one bus slave switches back to the normal mode upon detection of the application of the first and second predetermined current waveform (see col. 6, line 36 through col. 7, line 11). Therefore, it would have been obvious to a person of an ordinary skill in the art at the time the invention was made to have combined the teachings of Brisse et al. within the system of Mores because it would reduce the power consumption of the battery.

In regard to claims 5, 13, Brisse et al. disclose wherein, in the energy saving mode, at least one of the first and second predetermined current waveform can be applied automatically to the bus line by at least one bus slave, and wherein, in the

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energy saving mode, the bus master monitors the bus line for the application of at least one of the first and second predetermined current waveform, and at least one bus slave switches back to the normal mode upon detection of the application of the first and second predetermined current waveform (see col. 6, line 36 through col. 7, line 11). Therefore, it would have been obvious to a person of an ordinary skill in the art at the time the invention was made to have combined the teachings of Brisse et al. within the system of Mores because it would reduce the power consumption of the battery.

In regard to claims 6, 14, Mores discloses wherein in order to switch the bus slave to the energy saving mode, the bus master transmits a switching signal to the bus slave (see col. 4, lines 20-60).

In regard to claims 7, 15, Brisse et al. disclose wherein the bus slave monitors for the end of the normal cycle time, and the bus slave automatically switches to the energy saving mode when the normal cycle time elapses (see col. 6, line 36 through col. 7, line 11). Therefore, it would have been obvious to a person of an ordinary skill in the art at the time the invention was made to have combined the teachings of Brisse et al. within the system of Mores because it would reduce the power consumption of the battery.

In regard to claims 8, 16, Brisse et al. disclose wherein a predetermined zero current waveform level is applied to the bus line in order to apply the first predetermined current waveform during a zero time, and the predetermined one current waveform level is applied to the bus line in order to apply the second predetermined current waveform during a zero time which is different to the zero time (see figure 3, col. 6, line 36 through col. 7, line 11). Therefore, it would have been obvious to a person of an ordinary skill in the art at the time the invention was

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made to have combined the teachings of Brisse et al. within the system of Mores because it would reduce the power consumption of the battery.

In regard to claim 9, Brisse et al. disclose wherein the current pause exists between the application of the zero current level and the application of the one current level (see figure 3, col. 6, line 36 through col. 7, line 11). Therefore, it would have been obvious to a person of an ordinary skill in the art at the time the invention was made to have combined the teachings of Brisse et al. within the system of Mores because it would reduce the power consumption of the battery.

In regard to claim 10, Brisse et al. disclose wherein the zero current level is equal to the one current level (see col. 6, line 36 through col. 7, line 11). Therefore, it would have been obvious to a person of an ordinary skill in the art at the time the invention was made to have combined the teachings of Brisse et al. within the system of Mores because it would reduce the power consumption of the battery.

In regard to claims 11-12, 17, Mores discloses wherein the bus system is used in a motor vehicle or passenger-carrying motor vehicle (see col. 1, lines 10-17).

Conclusion

7. All claims are rejected.

8. The prior arts made of record and not relied upon are considered pertinent to applicant's disclosure.

Yuth (US No. 5,883,446) discloses a system for switching between stand-by and wak-up states, of an information processing unit and of an analogue switch.

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Dorner et al. (US No. 5,781,585) disclose an arrangement for monitoring a two-wire bus line.

Buhring (US No. 6,542,947) discloses a data bus for serial data transmission.

Neudecker (US No. 6,282,668) discloses a data bus system for motor vehicles.

Hanf et al. (US No. 5,892,893) disclose a device for the bus-networked operation of an electronic unit with microcontroller and its use.

Mores (US No. 6,148,409) discloses a data transmission system.

9 Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Raymond Phan, whose telephone number is (703) 306-2756. The examiner can normally be reached on Monday-Friday from 6:30AM- 4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's Primary, Paul Myers can be reached on (703) 305-9656 or via e-mail addressed to paul.myers@uspto.gov. The fax phone number for this Group is (703) 872-9306.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [raymond.phan@uspto.gov].

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

RP

Raymond Phan

1/10/04